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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BERCK, KENNETH A

ART UNIT PAPER NUMBER

2879

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,260

Applicant(s)

ARNOLD, JORG

Examiner

Ken A Berck

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-47 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 29-47 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 29-34, 39, 44-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Noll (DE19843852).

Regarding claim 29, Noll discloses (fig 1-2) a light source with a bulb, a filament mounted within the bulb and which includes a flat section, a heating device for the filament, and an inner surface which includes a mirror coating which comprises a dielectric multiplayer coating.

Regarding claim 30, Noll discloses the filament comprises a sintered metal powder.

Regarding claim 31, Noll discloses (column 5) the filament comprises a metal selected from the group consisting of tungsten.

Regarding claim 32, Noll discloses (column 5) the filament comprises a nonmetal (radiator layer).

Regarding claim 33, Noll discloses (column 5) the filament comprises a metal carbide.

Regarding claim 34, Noll discloses (column 5) the filament is coated with a coating material which has a higher melt temperature than the filament.

Regarding claim 39, Noll discloses the flat section of the filament is substantially planar.

Regarding claim 44, the heating device comprises a pair of electrical contacts coupled to the filament for delivering an electrical current to the filament.

Regarding claim 45, Noll discloses the dielectric multilayer coating is spectrally selective so as to substantially reflect the heat radiation of the filament while substantially transmitting the visible light thereof.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Noll (DE19843852) in view of Singh et al. (US 5330854).

Noll discloses all of the above claim limitations but fails to clearly point out the filament coating material is selected from the group consisting of tantalum carbide, rhenium carbide, niobium carbide, zirconium carbide, and mixtures thereof.

Singh discloses the filament coating material is selected from the group consisting of tantalum carbide, rhenium carbide, niobium carbide, zirconium carbide, and mixtures thereof in order to enable capillary infiltration.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the light of Noll with the filament coating material is

selected from the group consisting of tantalum carbide, rhenium carbide, niobium carbide, zirconium carbide, and mixtures thereof in order to enable capillary infiltration, as taught by Singh.

Claims 36-38, 40-43 and 46-47 rejected under 35 U.S.C. 103(a) as being unpatentable over Noll (DE19843852) in view of Pirani (US 1726365).

Noll discloses all of the above claim limitations but fails to clearly point out the flat section of the filament comprises a strip with two longitudinal sides, two surface elements project from each of the respective longitudinal sides of the strip in the form of wings, the flat section of the filament is in the form of at least a portion of a cylindrical jacket, the bulb defines a longitudinal axis, with the filament being configured to define a coaxial center axis, a portion of the jacket includes a lengthwise extending opening, the filament is of inverted U-shaped configuration, the two longitudinal sides are each in the form of a U-shaped channel section and each of the surface elements projects from the strip at an angle of about 90 degrees.

Regarding claim 36, Pirani discloses (fig 5) the flat section of the filament comprises a strip with two longitudinal sides in order to have a uniform field of illumination.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Noll with the flat section of the filament comprises a strip with two longitudinal sides in order to have a uniform field of illumination, as taught by Pirani.

Regarding claim 37, Pirani discloses (fig 5) two surface elements project from each of the respective longitudinal sides of the strip in the form of wings in order to have a uniform field of illumination.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Noll with the two surface elements project from each of the respective longitudinal sides of the strip in the form of wings in order to have a uniform field of illumination, and the reasons above, as taught by Pirani.

Regarding claim 38, Pirani discloses (fig 6) each of the surface elements projects from the strip at an angle of about 90 degrees in order to have a uniform field of illumination.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Noll with the surface elements projects from the strip at an angle of about 90 degrees in order to have a uniform field of illumination, and the reasons listed above, as taught by Pirani.

Regarding claim 40, Pirani discloses the flat section of the filament is in the form of at least a portion of a cylindrical jacket in order to have a uniform field of illumination.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Noll with the flat section of the filament is in the form of at least a portion of a cylindrical jacket in order to have a uniform field of illumination, as taught by Pirani.

Regarding claim 41, Pirani discloses a portion of the jacket includes a lengthwise extending opening in order to have a uniform field of illumination.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Noll with the portion of the jacket includes a lengthwise extending opening in order to have a uniform field of illumination, and the reasons listed above, as taught by Pirani.

Regarding claim 42, Noll discloses the filament defines a diameter which is only slightly smaller than a diameter defined by the bulb.

Regarding claim 43, Pirani discloses the bulb defines a longitudinal axis, with the filament being configured to define a coaxial center axis in order to have a uniform field of illumination.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Noll with the bulb defines a longitudinal axis, with the filament being configured to define a coaxial center axis in order to have a uniform field of illumination, and the reasons listed above, as taught by Pirani.

Regarding claim 46, Pirani discloses the filament is of inverted U-shaped configuration in order to have a uniform field of illumination.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Noll with the filament is of inverted U-shaped configuration in order to have a uniform field of illumination, and the reasons listed above, as taught by Pirani.

Regarding claim 47, Pirani discloses the two longitudinal sides are each in the form of a U-shaped channel section in order to have a uniform field of illumination.


Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Noll with the two longitudinal sides are each in the form of a U-shaped channel section in order to have a uniform field of illumination, and the reasons listed above, as taught by Pirani.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

kab 
June 26, 2003


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